

AMENDMENTS TO THE CLAIMS

Claims 1-24 (Canceled).

25. (Currently amended) A method for removal of ATM cells from an ATM communications device, comprising:
providing a plurality of ATM cells, a plurality of which are in each case assigned to a common frame and which are stored in connection-specific queues;
providing a first algorithm by means of which, with the exception of a first and a last ATM cell in a frame, all newly arriving cells in the frame are removed;
providing a second algorithm by means of which all from a first cell to a last cell, are removed upon arrival in a queue from the ATM communications device;
at a start of a transmission process, indicating by a user a maximum number of ATM cells per frame, and transmitting the ATM cells using said maximum number; and
when said maximum number is exceeded, discarding the associated frame or using the first algorithm.

~~The method according to claim 18~~ wherein no low-priority cells are stored for a connection if the length of the queue for said connection is of at least one size $S_PPD_1 = S_EPD_1 + MFS$, where S_EPD_1 is independent of said connection and a maximum number of cells per MFS depends on the connection, where PPD represents partial packet discard, EPD represents early packet discard, and MFS represents maximum frame size.

Claims 26-29. (Canceled)

30. (Currently amended) The method according to claim ~~28~~25 wherein a queue-specific value S_EPD_0 is greater than a value S_PPD_1 and less than a value $S_PPD_0 + MFS$ where MFS is the maximum number of cells per frame, and the value S_PPD_0 represents a measure for a fixed upper limit for the queue, where MFS represents maximum frame size.

31. (Currently amended) A method for removal of ATM cells from an ATM communications device, comprising:

providing a plurality of ATM cells, a plurality of which are in each case assigned to a common frame and which are stored in connection-specific queues;

providing a first algorithm by means of which, with the exception of a first and a last ATM cell in a frame, all newly arriving cells in the frame are removed;

providing a second algorithm by means of which all from a first cell to a last cell, are removed upon arrival in a queue from the ATM communications device;

at a start of a transmission process, indicating by a user a maximum number of ATM cells per frame, and transmitting the ATM cells using said maximum number; and

when said maximum number is exceeded, discarding the associated frame or using the first algorithm,

~~The method according to claim 18~~ wherein if a filling level of a buffer store is low, high-priority frames whose first cell has been transferred and whose frame length does not exceed the maximum number of cells per frame are not subjected to the first algorithm.

32. (Currently amended) A method for removal of ATM cells from an ATM communications device, comprising:

providing a plurality of ATM cells, a plurality of which are in each case assigned to a common frame and which are stored in connection-specific queues;

providing a first algorithm by means of which, with the exception of a first and a last ATM cell in a frame, all newly arriving cells in the frame are removed;

providing a second algorithm by means of which all from a first cell to a last cell, are removed upon arrival in a queue from the ATM communications device;

at a start of a transmission process, indicating by a user a maximum number of ATM cells per frame, and transmitting the ATM cells using said maximum number; and

when said maximum number is exceeded, discarding the associated frame or using the first algorithm,

~~The method according to claim 18~~ wherein if a filling level of a buffer store is low, low-

priority frames whose first cell has been transferred and whose frame length does not exceed the maximum number of cells per frame are not subjected to the first algorithm.

33. (Previously presented) The method according to claim 30 wherein an EPD-flag and a FPD-flag are not set at a same time, where FPD represents full packet discard.

34. (Previously presented) The method according to claim 33 wherein the values MFS + S_EPD 0 are stored and variables EPD_FLAG, FPD_FLAG and current_Frame_length are controlled for each connection, a variable current_Frame_length being a measure of a length of the current frame.

35. (Canceled)